#### TITLE 10 ZONING

#### CHAPTER 18

## A-P AIRPORT DISTRICT

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# 10-18-1 Basic Intent and Purpose. It is hereby found that:

- (A) An airport hazard endangers the lives and property of users of the Muscatine Municipal Airport and property or occupants of the land in its vicinity, and also if of the obstructive type, in effect reduces the size of the area available for the landing, takeoff, and maneuvering of aircraft, thus tending to destroy or impair the utility of the Muscatine Municipal Airport and the public investment therein.
- (B) The creation or establishment of an airport hazard is a public nuisance and an injury to the region served by the Muscatine Municipal Airport.
- (C) For the protection of the public health, safety, order, convenience, prosperity, and general welfare, it is necessary to prevent the creation of airport hazards to regulate and restrict the use of land in the vicinity of the Muscatine Municipal Airport.
- (D) The prevention of airport hazards should be accomplished, to the extent legally possible, by the proper exercise of the police power.

(E) The prevention of the creation or establishment of airport hazards and the elimination, removal, alteration, mitigation, or marking and lighting of existing airport hazards are public purposes for which municipalities may raise and expend public funds, as an incident to the operation of airports, to acquire lands or property interests therein.

10-18-2 <u>Definitions.</u> As used in this Chapter, unless the context otherwise requires:

- (A) "Airport" means the Muscatine Municipal Airport.
- (B) "Airport elevation" means the established elevation of the highest point on the usable landing area, which elevation is established to be five hundred forty-seven and one-half feet (547.5') above mean sea level.
- (C) "Airport hazard" means any structure or object of natural growth located on or in the vicinity of the airport, or any use of land near such airport, which obstructs the airspace required for the flight of aircraft in landing or takeoff at such airport or is otherwise hazardous to such landing or takeoff of aircraft.
- (D) "Decision height" means the height at which a decision must be made during an instrument landing system instrument approach to either continue the approach or to execute a missed approach procedure.
- (E) "Height". For the purpose of determining the height limits in all zones set forth in this Chapter and shown on the Muscatine Municipal Airport Zoning Map, the datum shall mean sea level elevation, unless otherwise specified.
- (F) "Instrument runway" means a runway having an existing instrument approach procedure utilizing air navigation facilities or area type navigation equipment for which an instrument approach procedure has been approved or planned.
- (G) "Landing area" means the area of the airport used for the landing, taking off, or taxiing of aircraft.
- (H) "Minimum descent altitude" means the lowest altitude, expressed in feet above mean sea level, to which descent is authorized on final approach or during circle-to-land maneuvering in execution of a standard approach procedure where no electronic glide slope is provided.
- (I) "Minimum enroute altitude" means the altitude in effect

between radio fixes which assures acceptable navigational signal coverage and meets obstruction clearance requirements between those fixes.

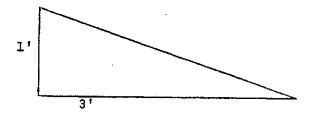
- (J) "Minimum obstruction clearance altitude" means the specified altitude in effect between radio fixes on very high frequency omni-range station airways, off-airway route, or route segments which meets obstruction clearance requirements for the entire route segment and which assures acceptable navigational signal coverage only within twenty-two (22) miles of a VOR.
- (K) "Nonconforming use" means any pre-existing structure, object of natural growth, or use of land which is inconsistent with the provisions of this Chapter or an amendment thereto.
- (L) "Nonprecision instrument runway" means a runway having an existing instrument approach procedure utilizing air navigation facilities with only horizontal guidance, or area type navigation equipment, for which a straight-in non-precision instrument approach procedure has been approved or planned, and for which no precision approach facilities are planned or indicated on a planning document having the approval of the Federal Aviation Administration (FAA).
- (M) "Person" means an individual, firm, partnership, corporation, company, association, joint stock association, or governmental entity. It includes a trustee, receiver, assignee, or similar representative of any of them.
- (N) "Planned". As used in this Chapter, only those proposed future airport developments that are so indicated on a planning document having the approval of the FAA and the City of Muscatine.
- (0) "Primary surface" means a surface longitudinally centered on a runway. When the runway has a specially prepared hard surface, the primary surface extends two hundred feet (200') beyond each end of that runway, but when the runway has no specially prepared hard surface, or planned hard surface, the primary surface ends at each end of that runway. The elevation of any point on the primary surface is the same as the elevation of the nearest point on the runway centerline. The width of a primary surface is:
  - 1. Two hundred fifty feet (250') for utility runways having only visual approaches.
  - 2. Five hundred feet (500') for utility runways having nonprecision instrument approaches.

- 3. For other utility runways the width is:
  - (a) Five hundred feet (500') for visual runways having only visual approaches.
  - (b) Five hundred feet (500') for nonprecision instrument runways having visibility minimums greater than three-fourths (3/4) statute mile.

The width of the primary surface of a runway will be that width prescribed in this subsection for the most precise approach existing or planned for either end of that runway.

- (R) "Runway" means any existing or planned paved surface or turfcovered area of the airport which is specifically designated, or used or planned to be used for the landing or takeoff of aircraft.
- (S) "Slope" means an incline from the horizontal expressed in an arithmetic ratio of horizontal magnitude to vertical magnitude.

Example:



Slope = 3:1 (3 feet horizontal to 1 foot vertical)

- (P) "Tree" means any object of natural growth.
- (Q) "Utility runway" means a runway that is constructed for an intended use by propeller-driven aircraft of twelve thousand, five hundred (12,500) pounds maximum gross weight or less.
- (T) "Visual runway" means a runway intended solely for the operation of aircraft using visual approach procedures with no straight-in instrument approach procedure and no instrument designation indicated on an FAA-approved airport layout plan, or by any planning document submitted to the FAA by competent authority.

10-18-3 <u>Airspace Zones</u>. In order to carry out the provisions of this Chapter, there are hereby created and established the following airspace zones, whose locations and dimensions are

described below and which are shown on the Muscatine Municipal Airport Zoning Map, consisting of two (2) sheets and dated October 16, 1975, which is made a part hereof by reference and is on file in the Office of the City Clerk. An area located in more than one of the following zones is considered to be only in the zone with the more restrictive height limitation. The various zones are hereby established and defined as follows:

- (A) "Primary zone' means all that land which lies directly under the primary surface.
- (B) "Horizontal zone" means all that land which lies directly under an imaginary horizontal surface one hundred fifty feet (150') above the established airport elevation, or a height of six hundred ninety-seven and one-half feet (697.5') above mean sea level, the perimeter of which is constructed by swinging arcs of five thousand feet (5,000') radii from the center of each end of the primary surface of existing or planned runways designated as utility or visual and ten thousand feet (10,000') for all others, and connecting adjacent arcs by lines tangent to these arcs. The radius of the arc specified for each end of a runway will have the same arithmetical value. That value will be the highest determined for either end of the runway. The horizontal zone does not include the approach and transitional zones.
- (C) "Conical zone" means all that land which lies directly under an imaginary conical surface extending upward and outward from the periphery of the horizontal zone at a slope of twenty to one (20 to 1) for horizontal distance of four thousand feet (4,000') as measured radially outward from the periphery of the horizontal surface. The conical zone does not include the precision instrument approach zones and transitional zones.
- (D) "Approach zone" means all that land which lies directly under an imaginary approach surface centered on the extended centerline at each end of a runway. The inner edge of the approach surface is at the same width and elevation as, and coincides, with the end of the primary surface. The approach surface is applied to each end of each runway based upon the type of approach available or planned for that runway end.
  - 1. The inner edge of the approach surface is:
    - (a) Two hundred fifty feet (250') wide for visual utility runways.
    - (b) Five hundred feet (500') wide for visual runways

other than utility runways and nonprecision instrument runways.

- (c) One thousand feet (1,000') for precision instrument runways.
- 2. The outer edge of the approach zone is:
  - (a) One thousand, two hundred fifty feet (1,250') for visual utility runways.
  - (b) One thousand, five hundred feet (1,500') for visual runways other than utility runways.
  - (c) Four thousand feet (4,000') for nonprecision instrument runways.
  - (d) Sixteen thousand feet (16,000') for precision instrument runways.
- 3. The approach zone extends for a horizontal distance of:
  - (a) Five thousand feet (5,000') at a slope of twenty to one (20 to 1) for all visual runways.
  - (b) Ten thousand feet (10,000') at a slope of thirty-four to one (34 to 1) for nonprecision instrument runways.
  - (c) Ten thousand feet (10,000') at a slope of fifty to one (50 to 1), and then twelve thousand feet (12,000') at a slope of forty to one (40 to 1), and then restricted to five hundred feet (500') above airport elevation for twenty-eight thousand feet (28,000') for precision instrument runways.
- (E) "Transitional zone" means all that land which lies directly under an imaginary surface extending upward and outward at ninety degree (90°) angles to the runway centerline and the runway centerline extended at a slope of seven to one (7 to 1) from the sides of the primary surface and from the sides of the approach surfaces. Transitional surfaces for those portions of the precision approach surface which project through and beyond the limits of the conical surface, extend a distance of five thousand feet (5,000') measured horizontally from the edge of the approach surface and at right angles to the runway centerline. The transitional surface for the precision approach extends upwards and outward at a slope of seven to one (7 to 1) until it intersects a plane five

hundred feet (500') above the airport elevation, at which time it becomes a plane five hundred feet (500') above the airport elevation.

(F) No structure shall be erected that raises the published minimum descent altitude or decision height for an instrument approach to any runway, nor shall any structure be erected that causes the minimum obstruction clearance altitude or minimum enroute altitude to be increased on any Federal airway.

10-18-4 <u>Height Restrictions</u>. Except as otherwise provided in this Chapter, and except as necessary and incidental to airport operations, no structure or tree shall be constructed, altered, maintained, or allowed to grow in any airspace zone created in Section 10-18-3 so as to project above any of the imaginary airspace surfaces described in said Section 10-18-3 hereof. Where an area is covered by more than one height limitation, the more restrictive limitations shall prevail.

### 10-18-5 Land Use Restrictions.

- (A) Subject to all times to the height restrictions set forth in Section 10-18-4, no use shall be made of any land in any of the airspace zones defined in Section 10-18-3 which creates or causes interference with the operations of radio or electronic facilities of the airport or with radio or electronic communications between the airport and aircraft, makes it difficult for pilots to distinguish between airport lights and other lights, results in glare in the eyes of pilots using the airport, impairs visibility in the vicinity of the airport, or otherwise endangers the landing, taking off, or maneuvering of aircraft using or intending to use the Muscatine Municipal Airport.
- (B) The primary zone shall contain no buildings or temporary structures and shall be restricted to those uses which will not create, attract, or bring together an assembly of persons thereon. Permissive uses include agricultural activities, light outdoor recreation (nonspectator), and auto parking.
- (C) The following uses are specifically prohibited under the approach zones:
  - 1. Theaters, fairgrounds, and auditoriums.
  - 2. Gas and oil facilities.
  - 3. Trash dumps and incinerators.

- 4. Poultry and mink farms.
- (D) Subject to all times to the restrictions set forth in Sections 10-18-4 and 10-18-5(A), (3) and (C), the land in the airspace zones are subject to the regulations and requirements of the zoning district in which they are situated, as shown on the District Map of the City of Muscatine, as described in Section 10-2-2 of the Zoning Ordinance.

# 10-18-6 <u>Lighting</u>.

- (A) Notwithstanding the provisions of Section 10-18-5, the owner of any structure over two hundred feet (200') above ground level must install on the structure lighting in accordance with FAA Advisory Circular 70-7460-ID and amendments. Additionally, any structure constructed after the effective date of this Ordinance and exceeding nine hundred forty-nine feet (949') above ground level must install on that structure high intensity white obstruction lights in accordance with Chapter 6 of FAA Advisory Circular 70-7460-ID and amendments.
- (3) Any permit or variance may be so conditioned as to require the owner of the structure or growth in question to permit the City of Muscatine at its own expense to install, operate, and maintain thereto such markers or lights as may be necessary to indicate to pilots the presence of an airspace hazard.

10-18-7 Airport Zoning Map. The several zones herein established are shown on the Muscatine Municipal Airport Zoning Map, consisting of two (2) sheets and dated October 16, 1975, made a part hereof by reference and on file in the Office of the City Clerk, which map, together with such amendments thereto as may from time to time be made, and all notations, references, elevations, data, zone boundaries, and other information thereon, shall be and the same is hereby adopted as part of this Chapter.

#### 10-18-8 Nonconforming Uses.

(A) Regulations Not Retroactive. The regulations provided in this Chapter shall not be construed to require the removal, lowering, or other changes or alteration of any structure or tree not conforming to the regulations as of the effective date of this Chapter, or otherwise interfere with the continuance of a nonconforming use. Nothing contained herein shall require any change in the construction, alterations, or intended use of any structure, the construction or alteration of which was begun prior to the effective date of this Chapter, and is diligently prosecuted.

(B) Marking and Lighting. Notwithstanding the preceding provision of this Section, the owner of any existing nonconforming structure or tree is hereby required to permit the installation, operation, and maintenance thereon of such markers and lights as shall be deemed necessary by the appropriate official who may be charged with the duty of determining the necessity of lighting and marking to indicate to the operators of aircraft in the vicinity of the airport the presence of such airport hazards.

## 10-18-9 Permits.

- (A) Future Uses. No material changes shall be made in the use of land and no tree or structure shall be erected, altered, planted, or otherwise established in any zone hereby created, unless a permit therefore shall have been applied for and granted by the Building and Zoning Administrator.
  - 1. However, a permit for a tree or structure of less than seventy-five feet (75') of vertical height above the ground shall not be required in the horizontal and conical zones or in any approach and transitional zones beyond a horizontal distance of four thousand, two hundred feet (4,200') from each end of the runway, except when such tree or structure, because of terrain, land contour, or topographic features, would extend the height limits prescribed for the respective zone.
  - Nothing contained in this foregoing exception shall be construed as permitting or intending to permit any construction or growth of any structure or tree in excess of any of the height limitations established by this Chapter.
- (B) Existing Uses. Before any existing use or structure may be replaced, substantially altered or repaired, or rebuilt within any zone established herein, a permit must be secured authorizing such replacement, change, or repair. No permit shall be granted that would allow the establishment or creation of an airport hazard or permit a nonconforming use, structure, or tree to become a greater hazard to air navigation than it was on the effective date of this Ordinance or any amendments thereto, or than it is when the application for a permit is made. Except when indicated, all applications for such permit shall be granted.
- (C) Nonconforming Uses Abandoned or Destroyed. Whenever the Building and Zoning Administrator determines that a nonconforming tree or structure has been abandoned or more than

sixty-five percent (65%) torn down, physically deteriorated, or decayed, no permit shall be granted that would allow such structure or tree to exceed the applicable height limit or otherwise deviate from the zoning regulations.

10-18-10 <u>Variances</u>. Any person desiring to erect or increase the height of any structure, permit the growth of any tree, or use his property not in accordance with the regulations prescribed in this Chapter, may apply to the Zoning Board of Adjustment for a variance from such regulations. Such variances shall be allowed where it is duly found that a literal application or enforcement of the regulations would result in practical difficulty or unnecessary hardship and relief granted would not be contrary to the public interest but will do substantial justice and be in accordance with the spirit of this Chapter.

(A) No application for variance to the requirements of this Chapter may be considered by the Zoning Board of Adjustment, unless a copy of the application has been submitted to the Airport Manager of the Muscatine Municipal Airport for an opinion as to the aeronautical effects of such a variance.

10-18-11 Appeals. Any person aggrieved, or any taxpayer affected, by any decision by the Building and Zoning Administrator made in the administration of this Chapter may appeal to the Zoning Board of Adjustment by complying with the provisions of Section 10-22-2(c) of the Zoning Ordinance.

10-18-12 Conflicting Regulations. Where there exists a conflict between any of the regulations or limitations prescribed in this Chapter and any other regulations applicable to the same area, whether the conflict be with respect to the height of structures or trees, the use of land, or any other matter, the more stringent limitation or requirement shall govern and prevail.